We claim:

1. A composition comprising a polymer covalently bonded to the side walls of carbon nanotubes.

2. The composition of claim 1 wherein the nanotubes comprise single wall carbon nanotubes, multiple wall carbon nanotubes, or a combination thereof.

3. The composition of claim 1 wherein the carbon nanotubes are present in a concentration of less than about 50 percent by weight.

4. The composition of claim 1 wherein the carbon nanotubes are present in a concentration from about 0.1 percent by weight to about 40 percent by weight.

5. The composition of claim 1 wherein the polymer is selected from the group consisting of PEI, Polyimide, Poly ether sulfone (PES), Poly phenyl sulfone (PPS), Per fluoro alkoxy (PFA), Fluorinated ethylene propylene (FEP), Ethylene tri fluoro ethylene (ETFE) Poly sulfone, Polystyrene, Poly ether Ketone (PEK), Poly ether ketone ketone (PEKK), polybutylene terephthalate (PBT), polyolefins (PO), polyethylene terephthalate (PET), styrene block co-polymers, styrene-butadiene rubber, nylon in the form of polyether block polyamide (PEBA), polyetheretherketone (PEEK), poly(vinylidenefluroide), poly(tetraflurorethylene) (PTFE), polyethylene, polypropylene, poly(vinylchloride) (PVC), ethyl vinyl acetate and blends and copolymers thereof.

6. The composition of claim 1 wherein the carbon nanotubes have functional groups attached to the side walls that bridge between the walls of the nanotubes and the polymer.

7. The composition of claim 6 wherein the polymer is a multifunctional polymer having two or more functional groups that are covalently bonded with carbon nanotubes.

8. The composition of claim 7 wherein the polymer is covalently bonded to the nanotubes to form polymer-nanotube structures that can self order.

9. The composition of claim 7 wherein the polymer is covalently bonded to the nanotubes such that polymer chains are crosslinked by the nanotubes.

10. An article comprising the composition of claim 1.

11. The article of claim 10 wherein the article comprises a wafer carrier suitable for transporting semi-conductor wafers.

12. The article of claim 10 wherein the article comprises a bipolar plate.

13. The article of claim 10 wherein the article comprises an electrode.

14. A liquid dispersion comprising ethyl vinyl acetate and carbon fibers.

15. The liquid dispersion of claim 14 wherein the carbon fibers comprise single wall carbon nanotubes, multiple wall carbon nanotubes or a combination thereof.

16. The liquid dispersion of claim 14 wherein the carbon fibers are present in a concentration of less than about 50 percent by weight.

17. The liquid dispersion of claim 14 wherein the carbon fibers are presenting a concentration from about 0.1 percent by weight to about 40 percent by weight.

18. The liquid dispersion of claim 14 wherein the carbon fibers comprise functional groups located on the ends of the nanotubes, along the side walls of the nanotubes, or both.

19. The liquid dispersion of claim 18 wherein the functional groups comprise fluorine.

20. The liquid dispersion of claim 14 wherein the dispersion comprises an aqueous dispersion.

21. The liquid dispersion of claim 14 wherein the EVA has a melt index from about 2 g/10mn to about 800 g/10mn as determined by ASTM D1238 procedure with a temperature of 190° C and a load of 2.16 Kg.

22. The liquid dispersion of claim 14 wherein the EVA has a density from about 0.92 g/cm^3 to about 0.95 g/cm^3.

23. The liquid dispersion of claim 14 wherein the EVA has a VA content from about 20 percent to about 30 percent.

24. The liquid dispersion of claim 14 wherein the weight ratio of EVA to nanotubes is from about 0.005 to about 1.

25. A liquid dispersion comprising poly(vinyl alcohol) and carbon fibers.

26. An article comprising a polymer and fluorinated carbon nanotubes.

27. The article of claim 25 wherein the carbon nanotubes comprise single wall carbon nanotubes, multiple wall carbon nanotubes or a combination thereof.

28. The article of claim 26 wherein the fluorinated carbon nanotubes are covalently bonded to the polymer.

29. The article of claim 26 wherein the fluorinated carbon nanotubes a mixed throughout the polymer.

30. The article of claim 26 wherein the polymer and fluorinated carbon nanotubes are coated onto the surface of the article.

31. The article of claim 26 wherein the fluorinated carbon nanotubes are present in a concentration of less than about 50 percent by weight.

32. The article of claim 26 wherein the fluorinated carbon nanotubes are present in a concentration from about 0.1 percent by weight to about 40 percent by weight.

33. The article of claim 26 wherein the polymer is selected from the group consisting of polybutylene terephthalate (PBT), polyolefins (PO), polyethylene terephthalate (PET), styrene block co-polymers, styrene-butadiene rubber, nylon in the form of polyether block polyamide (PEBA), polyetheretherketone (PEEK), poly(vinylidenefluroide), poly(tetraflurorethylene) (PTFE), polyethylene, polypropylene, poly(vinylchloride) (PVC), ethyl vinyl acetate and blends and copolymers thereof.

34. The article of claim 26 wherein the article comprises a wafer carrier having structural elements suitable for transporting a plurality of semi-conductor wafers.

35. The article of claim 26 wherein the article comprises a bipolar plate suitable for use in electrochemical cells.

36. A method of forming a composite, the method comprising injecting a liquid dispersion of carbon fibers within an extruder having a polymer within the extruder and applying shear to blend the carbon fibers and the polymer.

37. The method of claim 36 wherein the liquid dispersion of carbon fibers comprises an aqueous dispersion of carbon fibers and ethyl vinyl acetate.

38. The method of claim 37 wherein the carbon fibers comprise single wall carbon nanotubes, multiple wall carbon nanotubes, or a combination thereof.

39. The method of claim 37 wherein the carbon fibers are present at a concentration of less than about 50 percent by weight.

40. The method of claim 37 wherein the carbon fibers are present at a concentration from about 0.1 percent by weight to about 40 percent by weight.

41. The method of claim 36 wherein the carbon fibers comprise functional groups that can covalently bond with the polymer, wherein covalent bonding between the carbon fibers and the polymer occurs in the extruder.

42. The method of claim 36 wherein the composite is fed from the extruder to a shaping apparatus where the composite is formed into an article having a desired shape and size.

43. The method of claim 42 wherein the shaping apparatus is selected form the group consisting of rollers, injection molds, compression molds, and combinations thereof.

44. The method of claim 36 wherein the composite is feed from the extruder and coated onto an article to provide a layer of the composite on a surface of the article.

45. The method of claim 36 wherein the extruder comprises a twin-screw extruder.

46. A wafer carrier comprising a slot for the support of a wafer, wherein the slot comprises wafer contact points having a surface with a composite of polymer associated with carbon nanotubes.

47. The wafer carrier of claim 46 wherein carbon nanotubes are mixed throughout the polymer.

48. The wafer carrier of claim 46 wherein the carbon nanotubes are covalently bonded to the polymer.

49. The wafer carrier of claim 46 wherein the carbon nanotubes comprise single wall carbon nanotubes.

50. The wafer carrier of claim 46 wherein the carbon nanotubes are present in a concentration of less than about 1 percent by weight.

51. The wafer carrier of claim 46 wherein the carbon nanotubes are present in a concentration less than about 0.5 percent by weight.

52. The wafer carrier of claim 46 wherein the transparency of the polymer not affected by the carbon nanotubes.

53. The wafer carrier of claim 46 wherein the composite reduces electrostatic discharge relative to carriers made of plastic.

54. The wafer carrier of claim 46 wherein the polymer is selected from the group consisting of polybutylene terephthalate (PBT), polyolefins (PO), polyethylene terephthalate (PET), styrene block co-polymers, styrene-butadiene rubber, nylon in the form of polyether block polyamide (PEBA), polyetheretherketone (PEEK), poly(vinylidenefluroide), poly(tetraflurorethylene) (PTFE), polyethylene, polypropylene, poly(vinylchloride) (PVC), ethyl vinyl acetate and blends and copolymers thereof.

55. A fuel cell comprising a bipolar plate, the bipolar plate comprising a composite of polymer associated with carbon nanotubes.

56. The bipolar plate of claim 55 wherein the carbon nanotubes are mixed within the polymer.

57. The bipolar plate of claim 55 wherein the carbon nanotubes are covalently bonded to the polymer.

58. The bipolar plate of claim 55 wherein the carbon nanotubes comprise single wall carbon nanotubes, multiple wall carbon nanotubes, or a combination thereof.

59. The bipolar plate of claim 55 wherein the carbon nanotubes are present in a concentration from about 1 percent by weight to about 50 percent by weight.

60. The bipolar plate of claim 55 wherein the polymer is selected from the group consisting of polybutylene terephthalate (PBT), polyolefins (PO), polyethylene terephthalate (PET), styrene block co-polymers, styrene-butadiene rubber, nylon in the form of polyether block polyamide (PEBA), polyetheretherketone (PEEK), poly(vinylidenefluroide), poly(tetraflurorethylene) (PTFE), polyethylene, polypropylene, poly(vinylchloride) (PVC), ethyl vinyl acetate and blends and copolymers thereof.

61. The bipolar plate of claim 55 further comprising a first side and a second side wherein the first side comprises reactant flow channels formed into the surface of the plate.

62. The bipolar plate of claim 61 wherein the second side comprises reactant flow channels formed into the surface of the plate.